

0516
0606

Page 11



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/781,796B

DATE: 06/06/2002
TIME: 15:05:54

Input Set : A:\EP.txt
Output Set: N:\CRF3\06062002\I781796B.raw

3 <110> APPLICANT: BEAUDOIN, Adrien R.
4 SVIGNY, Jean
5 BACH, Fritz H.
6 ROBSON, Simon
7 <120> TITLE OF INVENTION: ATP-DIPHOSPHOHYDROLASES, PROCESS OF PURIFICATION
8 THEREOF AND PROCESS OF PRODUCING THEREOF BY RECOMBINANT
9 TECHNOLOGY
10 <130> FILE REFERENCE: 920333.90019
11 <140> CURRENT APPLICATION NUMBER: 09/781,796B
12 <141> CURRENT FILING DATE: 2001-02-12
13 <150> PRIOR APPLICATION NUMBER: 08/419,204
14 <151> PRIOR FILING DATE: 1995-04-10
15 <150> PRIOR APPLICATION NUMBER: CA96/00223
16 <151> PRIOR FILING DATE: 1996-04-10
17 <150> PRIOR APPLICATION NUMBER: 08/930,921
18 <151> PRIOR FILING DATE: 1998-02-01
19 <160> NUMBER OF SEQ ID NOS: 8
20 <170> SOFTWARE: PatentIn Ver. 2.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 510
23 <212> TYPE: PRT
24 <213> ORGANISM: Homo sapiens
25 <400> SEQUENCE: 1
26 Met Glu Asp Thr Lys Glu Ser Asn Val Lys Thr Phe Cys Ser Lys Asn
27 1 5 10 15
28 Ile Leu Ala Ile Leu Gly Phe Ser Ser Ile Ile Ala Val Ile Ala Leu
29 20 25 30
30 Leu Ala Val Gly Leu Thr Gln Asn Lys Ala Leu Pro Glu Asn Val Lys
31 35 40 45
32 Tyr Gly Ile Val Leu Asp Ala Gly Ser Ser His Thr Ser Leu Tyr Ile
33 50 55 60
34 Tyr Lys Trp Pro Ala Glu Lys Glu Asn Asp Thr Gly Val Val His Gln
35 65 70 75 80
36 Val Glu Glu Cys Arg Val Lys Gly Pro Gly Ile Ser Lys Phe Val Gln
37 85 90 95
38 Lys Val Asn Glu Ile Gly Ile Tyr Leu Thr Asp Cys Met Glu Arg Ala
39 100 105 110
40 Arg Glu Val Ile Pro Arg Ser Gln His Gln Glu Thr Pro Val Tyr Leu
41 115 120 125
42 Gly Ala Thr Ala Gly Met Arg Leu Leu Arg Met Glu Ser Glu Glu Leu
43 130 135 140
44 Ala Asp Arg Val Leu Asp Val Val Glu Arg Ser Leu Ser Asn Tyr Pro
45 145 150 155 160
Pb

ENTERED

6/6/02

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/781,796B

DATE: 06/06/2002
TIME: 15:05:54

Input Set : A:\EP.txt
Output Set: N:\CRF3\06062002\I781796B.raw

66 Phe Asp Phe Gln Gly Ala Arg Ile Ile Thr Gly Gln Glu Glu Gly Ala
 165 170 175
 67 Tyr Gly Trp Ile Thr Ile Asn Tyr Leu Leu Gly Lys Phe Ser Gln Lys
 180 185 190
 70 Thr Arg Trp Phe Ser Ile Val Pro Tyr Glu Thr Asn Asn Gln Glu Thr
 195 200 205
 72 Phe Gly Ala Leu Asp Leu Gly Gly Ala Ser Thr Gln Val Thr Phe Val
 210 215 220
 73 225 230 235 240
 75 Pro Gln Asn Gln Thr Ile Glu Ser Pro Asp Asn Ala Leu Gln Phe Arg
 245 250 255
 76 255 260 265 270
 78 Leu Tyr Gly Lys Asp Tyr Asn Val Tyr Thr His Ser Phe Leu Cys Tyr
 275 280 285
 81 285 290 295 300
 82 295 300 305 310 315 320
 84 Gly Lys Asp Gln Ala Leu Trp Gln Lys Leu Ala Lys Asp Ile Gln Val
 320 325 330 335
 85 335 340 345 350
 87 Ala Ser Asn Glu Ile Leu Arg Asp Pro Cys Phe His Pro Gly Tyr Lys
 345 350 355 360 365
 88 355 360 365 370 375 380
 89 Lys Val Val Asn Val Ser Asp Leu Tyr Lys Thr Pro Cys Thr Lys Arg
 370 375 380 385 390 395 400
 90 395 400 405 410 415 420 425
 91 405 410 415 420 425 430 435
 92 420 425 430 435 440 445 450
 93 Phe Glu Met Thr Leu Pro Phe Gln Gln Phe Glu Ile Gln Gly Ile Gly
 450 455 460 465 470 475 480
 94 455 460 465 470 475 480 485
 95 Asn Tyr Gln Gln Cys His Gln Ser Ile Leu Glu Leu Phe Asn Thr Ser
 485 490 495 500 505 510
 96 490 495 500 505 510
 97 500 505 510
 98 505 510
 99 510
 100 510
 101 510
 102 510
 103 510
 104 510
 105 510
 106 510
 107 510
 108 510
 109 510
 110 510
 111 510
 112 510
 113 510
 114 510
 115 510
 116 510
 117 510
 118 510
 119 510
 120 510
 121 510
 122 510
 123 510
 124 510
 125 510
 126 510
 127 510
 128 510
 129 510
 130 510
 131 510
 132 510
 133 <210> SEQ ID NO: 2
 134 <211> LENGTH: 1818
 135 <212> TYPE: PRT
 136 <213> ORGANISM: Homo sapiens
 137 <214> LOCATION:
 138 <400> SEQUENCE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/781,796B

DATE: 06/06/2002
TIME: 15:05:54

Input Set : A:\EP.txt
Output Set: N:\CRF3\06062002\I781796B.raw

139 Ala Cys Cys Ala Cys Ala Cys Cys Ala Ala Gly Cys Ala Gly Cys Gly
 140 1 5 10 15
 142 Gly Cys Thr Gly Gly Gly Gly Gly Gly Ala Ala Ala Gly
 143 20 25 30
 145 Ala Cys Gly Ala Gly Gly Ala Ala Ala Gly Ala Gly Ala Gly Gly
 146 35 40 45
 148 Ala Ala Ala Ala Cys Ala Ala Ala Gly Cys Thr Gly Cys Thr Ala
 149 50 55 60
 151 Cys Thr Thr Ala Thr Gly Gly Ala Ala Gly Ala Thr Ala Cys Ala Ala
 152 65 70 75 80
 154 Ala Gly Gly Ala Gly Thr Cys Thr Ala Ala Cys Gly Thr Gly Ala Ala
 155 85 90 95
 157 Gly Ala Cys Ala Thr Thr Thr Gly Cys Thr Cys Cys Ala Ala Gly
 158 100 105 110
 160 Ala Ala Thr Ala Thr Cys Cys Thr Ala Gly Cys Cys Ala Thr Cys Cys
 161 115 120 125
 163 Thr Thr Gly Cys Thr Thr Cys Thr Cys Cys Thr Cys Thr Ala Thr
 164 130 135 140
 166 Cys Ala Thr Ala Gly Cys Thr Gly Thr Gly Ala Thr Ala Gly Cys Thr
 167 145 150 155 160
 169 Thr Thr Gly Cys Thr Thr Gly Cys Thr Gly Thr Gly Gly Gly Thr
 170 165 170 175
 172 Thr Gly Ala Cys Cys Ala Gly Ala Ala Cys Ala Ala Gly Cys
 173 180 185 190
 175 Ala Thr Thr Gly Cys Cys Ala Gly Ala Ala Ala Cys Gly Thr Thr
 176 195 200 205
 178 Ala Ala Gly Thr Ala Thr Gly Gly Ala Thr Thr Gly Thr Gly Cys
 179 210 215 220
 181 Thr Gly Gly Ala Thr Gly Cys Gly Gly Thr Thr Cys Thr Thr Cys
 182 225 230 235 240
 184 Thr Cys Ala Cys Ala Cys Ala Ala Gly Thr Thr Thr Ala Thr Ala Cys
 185 245 250 255
 187 Ala Thr Cys Thr Ala Thr Ala Ala Gly Thr Gly Gly Cys Cys Ala Gly
 188 260 265 270
 190 Cys Ala Gly Ala Ala Ala Gly Gly Ala Ala Thr Gly Ala
 191 275 280 285
 193 Cys Ala Cys Ala Gly Gly Cys Gly Thr Gly Gly Thr Gly Cys Ala Thr
 194 290 295 300
 196 Cys Ala Ala Gly Thr Ala Gly Ala Ala Gly Ala Ala Thr Gly Cys Ala
 197 305 310 315 320
 199 Gly Gly Gly Thr Thr Ala Ala Ala Gly Gly Thr Cys Cys Thr Gly Gly
 200 325 330 335
 202 Ala Ala Thr Cys Thr Cys Ala Ala Ala Ala Thr Thr Thr Gly Thr Thr
 203 340 345 350
 205 Cys Ala Gly Ala Ala Ala Gly Thr Ala Ala Ala Thr Gly Ala Ala Ala
 206 355 360 365
 208 Thr Ala Gly Gly Cys Ala Thr Thr Ala Cys Cys Thr Gly Ala Cys
 209 370 375 380
 211 Thr Gly Ala Thr Thr Gly Cys Ala Thr Gly Gly Ala Ala Gly Ala

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/781,796B

DATE: 06/06/2002
TIME: 15:05:54

Input Set : A:\EP.txt
Output Set: N:\CRF3\06062002\I781796B.raw

212	385	390	395	400
214	Gly Cys Thr Ala Gly Gly Ala Ala Gly Thr Gly Ala Thr Thr Cys			
	405	410	415	
215	Cys Ala Ala Gly Gly Thr Cys Cys Cys Ala Gly Cys Ala Cys Cys Ala			
217	420	425	430	
218	Ala Gly Ala Gly Ala Cys Ala Cys Cys Cys Gly Thr Thr Thr Ala Cys			
220	435	440	445	
221	Cys Thr Gly Gly Ala Gly Cys Cys Ala Cys Gly Gly Cys Ala Gly			
223	450	455	460	
224	Gly Cys Ala Thr Gly Cys Gly Thr Thr Gly Cys Thr Cys Ala Gly			
226	470	475	480	
227	465	485	490	495
229	Gly Ala Thr Gly Gly Ala Ala Ala Gly Thr Gly Ala Ala Gly Ala Gly			
230	500	505	510	
232	Thr Thr Gly Gly Cys Ala Gly Ala Cys Ala Gly Gly Thr Thr Cys			
233	515	520	525	
235	Thr Gly Gly Ala Thr Gly Thr Gly Gly Ala Gly Ala Gly			
236	530	535	540	
238	Gly Ala Gly Cys Cys Thr Cys Ala Gly Cys Ala Ala Cys Thr Ala Cys			
239	550	555	560	
241	Cys Cys Cys Thr Thr Thr Gly Ala Cys Thr Thr Cys Cys Ala Gly Gly			
242	565	570	575	
244	Gly Thr Gly Cys Cys Ala Gly Gly Ala Thr Cys Ala Thr Thr Ala Cys			
245	580	585	590	
247	Thr Gly Gly Cys Cys Ala Ala Gly Ala Gly Gly Ala Ala Gly Thr			
248	595	600	605	
250	Gly Cys Cys Thr Ala Thr Gly Gly Cys Thr Gly Gly Ala Thr Thr Ala			
251	610	615	620	
253	Cys Thr Ala Thr Cys Ala Ala Cys Thr Ala Thr Cys Thr Gly Cys Thr			
254	625	630	635	640
256	Gly Gly Cys Ala Ala Ala Thr Thr Cys Ala Gly Thr Cys Ala Gly			
257	645	650	655	
259	Ala Ala Ala Ala Cys Ala Ala Gly Gly Thr Gly Gly Thr Thr Cys Ala			
260	660	665	670	
262	Gly Cys Ala Thr Ala Gly Thr Cys Cys Ala Thr Ala Thr Gly Ala			
263	675	680	685	
265	Ala Ala Cys Cys Ala Ala Thr Ala Ala Thr Cys Ala Gly Gly Ala Ala			
266	690	695	700	
268	Ala Cys Cys Thr Thr Gly Gly Ala Gly Cys Thr Thr Gly Gly			
269	710	715	720	
271	Ala Cys Cys Thr Thr Gly Gly Gly Ala Gly Cys Cys Thr Cys			
272	725	730	735	
274	Thr Ala Cys Ala Cys Ala Ala Gly Thr Cys Ala Cys Thr Thr Thr			
275	740	745	750	
277	Gly Thr Ala Cys Cys Cys Cys Ala Ala Ala Cys Cys Ala Gly Ala			
278	755	760	765	
280	Cys Thr Ala Thr Cys Gly Ala Gly Thr Cys Cys Cys Cys Ala Gly Ala			
281	770	775	780	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/781,796B

DATE: 06/06/2002
TIME: 15:05:54

Input Set : A:\EP.txt
Output Set: N:\CRF3\06062002\I781796B.raw

286 Cys Gly Cys Cys Thr Cys Thr Ala Thr Gly Gly Cys Ala Ala Gly Gly	800
287 785 790 795	
289 Ala Cys Thr Ala Cys Ala Ala Thr Gly Thr Cys Thr Ala Cys Ala Cys	815
290 805 810	
292 Ala Cys Ala Thr Ala Gly Cys Thr Thr Cys Thr Gly Thr Gly Cys	830
293 820 825	
295 Thr Ala Thr Gly Gly Ala Ala Gly Gly Ala Thr Cys Ala Gly Gly	845
296 835 840	
298 Cys Ala Cys Thr Cys Thr Gly Gly Cys Ala Gly Ala Ala Ala Cys Thr	860
299 850 855	
301 Gly Gly Cys Cys Ala Ala Gly Gly Ala Cys Ala Thr Thr Cys Ala Gly	880
302 865 870 875	
304 Gly Thr Thr Gly Cys Ala Ala Gly Thr Ala Ala Thr Gly Ala Ala Ala	895
305 885 890	
307 Thr Thr Cys Thr Cys Ala Gly Gly Ala Cys Cys Cys Ala Thr Gly	910
308 900 905	
310 Cys Thr Thr Cys Ala Thr Cys Cys Thr Gly Gly Ala Thr Ala Thr	925
311 915 920	
313 Ala Ala Gly Ala Ala Gly Gly Thr Ala Gly Thr Gly Ala Ala Cys Gly	940
314 930 935	
316 Thr Ala Ala Gly Thr Gly Ala Cys Cys Thr Thr Ala Cys Ala Ala	960
317 945 950 955	
319 Gly Ala Cys Cys Cys Cys Thr Gly Cys Ala Cys Cys Ala Ala Gly	975
320 965 970	
322 Ala Gly Ala Thr Thr Gly Ala Gly Ala Thr Gly Ala Cys Thr Cys	990
323 980 985	
325 Thr Thr Cys Cys Ala Thr Thr Cys Cys Ala Gly Cys Ala Gly Thr Thr	1005
326 995 1000	
328 Thr Gly Ala Ala Ala Thr Cys Cys Ala Gly Gly Thr Ala Thr Thr	1020
329 1010 1015	
331 Gly Gly Ala Ala Ala Cys Thr Ala Thr Cys Ala Ala Cys Ala Ala Thr	1040
332 1025 1030 1035	
334 Gly Cys Cys Ala Thr Cys Ala Ala Ala Gly Cys Ala Thr Cys Cys Thr	1055
335 1045 1050	
337 Gly Gly Ala Gly Cys Thr Cys Thr Cys Ala Ala Cys Cys Cys	1070
338 1060 1065	
340 Ala Gly Thr Thr Ala Cys Thr Gly Cys Cys Cys Thr Thr Ala Cys Thr	1085
341 1075 1080	
343 Cys Cys Cys Ala Gly Thr Gly Thr Cys Cys Thr Cys Ala Ala	1100
344 1090 1095	
346 Thr Gly Gly Ala Thr Thr Thr Cys Thr Thr Gly Cys Cys Ala	1120
347 1105 1110 1115	
349 Cys Cys Ala Cys Thr Cys Cys Ala Gly Gly Gly Gly Ala Thr Thr	1135
350 1125 1130	
352 Thr Thr Gly Gly Gly Cys Ala Thr Thr Thr Cys Ala Gly Cys	1150
353 1140 1145	
355 Thr Thr Thr Thr Ala Cys Thr Thr Thr Gly Thr Gly Ala Thr Gly	1165
356 1155 1160	
358 Ala Ala Gly Thr Thr Thr Thr Ala Ala Ala Cys Thr Thr Gly Ala	

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/781,796B

DATE: 06/06/2002
TIME: 15:05:56

Input Set : A:\EP.txt
Output Set: N:\CRF3\06062002\I781796B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 8

6/6/02

file:///C:/Crf3/Outhold/VsrI781796B.htm